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Bioastronautics '05 Technology Forum

Forging Knowledge, Collaborations, and Solutions between NASA JSC and UTMB

INVITATION

+ NASA IS POISED ON THE THRESHOLD of a new era in exploration, when plans for a return to the Moon and missions to Mars are being forged. NASA is relying as never before on collaborators in academia and industry to bring these plans to fruition.

  The technologies needed to support crewmembers, so far from the support and comforts of Earth, call for both incremental and revolutionary progress. Bioastronautics is the domain of life sciences research, human support, and medical operations that is concerned with human space flight. NASA seeks collaborators and partners in this journey towards exploration.

  And Bioastronautics technologies may transform terrestrial life as well. Just as early space flight programs compelled the microelectronics that eventually brought on the IT revolution, Bioastronautics technology solutions may do the same.

+ JOIN US FOR THE BIOASTRONAUTICS TECHNOLOGY FORUM, an opportunity to forge the knowledge, collaborations, and solutions that will enable the next era of human space flight.

+ The 2005 Bioastronautics Technology Forum is organized by:
  - the Advanced Technology Integration Group at NASA's Johnson Space Center (*Web site*) and
  - the University of Texas Medical Branch (*Web site*)

WHO	Approximately 150 innovators, potential collaborators, and students from JSC and UTMB
WHAT	A small-scale, technology-focused forum
WHERE	Levin Hall on the UTMB campus in Galveston
WHEN	Wednesday, March 16
WHY	To forge the knowledge, collaborations, and solutions that will enable the next era of exploration

OBJECTIVES

This forum will focus on the common technology areas of greatest interest to the UTMB community and of greatest value to future space exploration missions.

+ LEARN about the unique constraints of the space flight environment, Bioastronautics technology needs, and emerging mechanisms for collaboration and funding;

+ COLLABORATE with like-minded innovators and experts working in research, technology, and operations; establish the connections and relationships that lead to strong collaborations and joint proposals; and

+ EXPLORE emerging solutions or new applications of current technology that will advance human space flight and biomedicine here on Earth.

Hear from NASA scientists and clinicians about their work, needs, and interests. During frequent networking breaks, you can exchange ideas and information with them. And then join in the conversation: participate in working groups that will recommend the most fruitful technology areas for collaboration.

DRAFT SCHEDULE

All presentations are allotted 30 minutes (including question and answer) unless otherwise noted. Presentations and discussion are scheduled from 0845 – 1730.

	WEDNESDAY, MARCH 16TH
0830	*Gather*
0845	Welcome and Charge to Participants – Dr. Adrian Perachio
0900	Bioastronautics Roadmap and the Space Flight Environment (1hr) – Dr. John Charles
1000	*Networking break*
1030	Autonomous Medical Care – Dr. Kathy Johnson *(Networking Team: Dr. Jeff Jones, Dr. Doug Hamilton)*
1100	Tissue Engineering and Bioreactor Technologies – Dr. Neal Pellis *(Networking Team: Dr. Diana Risin, Dr. Steve Gonda)*
1130	*Lunch*
1300	Human Adaptation and Countermeasures Technologies – Dr. Antony Jeevarajan *(Networking Team: Dr. Antony Jeevarajan)*
1330	Microbial Surveillance During Long-Duration Spaceflight – Dr. Rebekah Bruce *(Networking Team: Dr. Mark Ott, William Wong)*
1400	*Networking break*
1430	Exercise Countermeasures – Dr. Don Hagan *(Networking Team: Judith Hayes)*
1500	Charge to Working Groups (WGs) and separate into WGs (1hr) – Dr. Adrian Perachio
1600	*Rotate between WGs and continue deliberations (1hr)*
1700	WGs present recommendations
1730	Closing; *evening reception to continue discussions*

To encourage broad participation, each WG will be facilitated by two leads, one from JSC and one from UTMB. Recommendations will be compiled and distributed to attendees after the forum. Streaming audio talks from the forum will be published also.

UPDATES

Look for updates and news on the forum web page:

http://advtech.jsc.nasa.gov/btf05.asp